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RATNER AND PRESTIA

Suite 301

One Westlakes, Berwyn

P.O. Box 980

Valley Forge, PA 19482-0980

EXAMINER

DODDS, HAROLD E

ART UNIT

2177

PAPER NUMBER

5

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,630

Applicant(s)

TOYOMURA ET AL.

Examiner

Harold E. Dodds, Jr.

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☒ Claim(s) 4,5,10,11,28,34-39,44 and 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Claim Objections

2. Claims 4, 5, 10, 11, 28, 34-39, 44, and 47 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 4, 5, 10, 11, 28, 34-39, 44, and 47 have not been further treated on the merits.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 4, 5, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn et al. (U.S. Patent No. 6,449,617) and Bennett et al. (U.S. Patent No. 5,991,776).

5. Quinn renders obvious independent claim 1 by the following:
“...at least one directory for storing specific format files...” at col. 9, lines 47-49 and col. 13, lines 4-10.
“...which files having a certain predetermined form...” at col. 13, lines 4-10.
“...and a directory for storing non-specific format files...” at col. 9, lines 47-49 and col. 13, lines 4-10.

Quinn does not teach the use of free form data.

6. However, Bennett teaches the use of free form data as follows:
“...which files having any free form...” at col. 16, lines 52-56.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Bennett with Quinn to use free form data in order to allow users of a data media to store unstructured data and data of unknown structures and permit the storage of more types of data on data media. Quinn and Bennett have related applications and use similar technologies. They teach the use of computers, the use of databases, the use of directories, the use of files, the use of tables, and the use formats. Quinn provides the directories and the storing of specific format files and non-specific format files and Bennett provides free form data.

7. As per claims 4 and 46, the "...carryable memory media are memory card...", is taught by Quinn at col. 11, lines 10-17.

8. As per claim 5, the "...said directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10, the "...corresponds to storing those whose file form is the same as at least one of the file forms...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10, and the "...in the directory for storing specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

9. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn and Bennett as applied to claim 1 above, and further in view of lida et al. (U.S. Patent No. 6,385,690).

As per claim 2, the "...said directory for storing specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10, the "...and said directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10, but the "...are disposed in the same layer...", is not taught by either Quinn or Bennett.

However, lida teaches the use of the same layer on a directory tree as follows:

"...This state is shown in FIG. 26. A file called temptemp.tmp at the same level as that of a subdirectory called VOICE immediately under a root directory in FIG. 25 is changed in its name and directory...at col. 23, lines 40-43.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine lida with Quinn and Bennett to use the same layer on a directory tree in order to allow users of a data media to store related data having different formats

or other attributes at the same level in a directory tree to facilitate navigation between these different types of data. Quinn, Bennett, and lida have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, and the use formats. Quinn provides the directories and the storing of specific format files and non-specific format files, Bennett provides free form data, and lida provides directories on the same level on directory trees.

10. As per claim 3, the "...said directory for storing specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10, the "...and said directory for storing non-specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10, and the "...are disposed in a layer immediately under a root directory..." is taught by lida at col. 23, lines 40-43.

11. Claims 6, 7, 11, 17, 20-22, 32-34, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn et al. (U.S. Patent No. 6,449,617) and Otsuka et al. (U.S. Patent No. 5,454,096).

Quinn renders obvious independent claims 6 and 32 by the following:

"...for storing non-specific format files..." at col. 13, lines 4-10.

"...and means for storing non-specific format files..." at col. 13, lines 4-10.

"...in said carryable memory media..." at col. 11, lines 10-17.

"...for storing non-specific format files..." at col. 13, lines 4-10.

"...for storing non-specific format files..." at col. 13, lines 4-10.

"...in said carryable memory media..." at col. 11, lines 10-17.

"...and stores non-specific format files..." at col. 13, lines 4-10.

"...in said carryable memory media..." at col. 11, lines 10-17.

"...corresponding to said directory for storing non-specific format files..." at col. 9, lines 47-49 and col. 13, lines 4-10.

Quinn does not teach the forming of directories and the use of data storage areas.

12. However, Otsuka teaches the forming of directories and the use of data storage areas as follows:

"means for forming a directory..." at col. 8, lines 62-68.

"...wherein said means for forming a directory..." at col. 8, lines 62-68.

"...forms a directory..." at col. 8, lines 62-68.

"...at a data area..." at col. 5, lines 49-52.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Otsuka with Quinn to form directories and provide data storage areas in order to use standard procedures for defining directories and their storage areas and gain wider acceptance of the system. Quinn and Otsuka have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, the use formats, and the use of memory cards. Quinn provides the directories and the storing of specific format files and non-specific format files and Otsuka forms directories and provides data storage areas.

13. As per claims 7 and 33, the "...means for forming a directory..." is taught by Otsuka at col. 8, lines 62-68,
the "...for storing specific format files..." is taught by Quinn at col. 13, lines 4-10,
the "...and means for writing files of specific form in said carryable memory media..." is taught by Quinn at col. 10, line 67, col. 11, lines 1-5, col. 13, lines 4-10, and col. 11, lines 10-17,
the "...wherein said means for forming a directory..." is taught by Otsuka at col. 8, lines 62-68,
the "...for storing specific format files..." is taught by Quinn at col. 13, lines 4-10,
the "...forms a directory..." is taught by Otsuka at col. 8, lines 62-68,
the "...for storing specific format files in said carryable memory media..." is taught by Quinn at col. 13, lines 4-10 and col. 11, lines 10-17,
the "...and stores specific format files in said carryable memory media..." is taught by Quinn at col. 13, lines 4-10 and col. 11, lines 10-17,
the "...at a data area..." is taught by Otsuka at col. 5, lines 49-52,
and the "...corresponding to said directory for storing specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

14. As per claims 11 and 34, the "...comprising communication means..." is taught by Quinn at col. 10, lines 52-55,
the "...and file forming means for forming files..." is taught by Otsuka at col. 8, lines 62-68,

the "...based on data received through said communication means..." is taught by Quinn at col. 10, lines 52-55,
the "...wherein said means for storing files..." is taught by Quinn at col. 13, lines 4-10,
the "...stores said formed file..." is taught by Otsuka at col. 8, lines 62-68,
the "...in said carryable memory media..." is taught by Quinn at col. 11, lines 10-17,
the "...at a data area..." is taught by Otsuka at col. 5, lines 49-52,
and the "...corresponding to said directory for storing non-specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

15. As per claim 17, the "...wherein said file extraction means extracts the file..." is taught by Quinn at col. 9, lines 31-34,
the "...that conforms to a certain specific file form..." is taught by Quinn at col. 13, lines 4-10,
the "...from both of the data areas..." is taught by Otsuka at col. 5, lines 49-52,
the "...of said carryable memory media..." is taught by Quinn at col. 11, lines 10-17,
the "...one data area..." is taught by Otsuka at col. 5, lines 49-52,
the "...is that which corresponds to said directory for storing specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,
the "...and the other data area..." is taught by Otsuka at col. 5, lines 49-52,
and the "...is that which corresponds to said directory for storing non-specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

16. As per claim 20, the "...said file extraction means extracts the file..." is taught by Quinn at col. 9, lines 31-34,

the "...that conforms to said specific file form..." is taught by Quinn at col. 13, lines 4-10, and the "...based on the file inner structure..." is taught by Quinn at col. 11, lines 62-64.

17. As per claim 21, the "...said file extraction means extracts the file..." is taught by Quinn at col. 9, lines 31-34, the "...that conforms to said specific file form..." is taught by Quinn at col. 13, lines 4-10, and the "...through a plurality of steps of extraction..." is taught by Quinn at col. 15, lines 46-52.

18. As per claim 22, the "...input means for inputting conditions for file extraction..." is taught by Quinn at col. 3, lines 5-8, col. 12, lines 33-37, and col. 9, lines 31-34, the "...wherein said file extraction means extracts..." is taught by Quinn at col. 9, lines 31-34, the "...among those which conform to said specific file form..." is taught by Quinn at col. 13, lines 4-10, and the "...file that satisfies said conditions for file extraction..." is taught by Quinn at col. 13, lines 4-10, col. 12, lines 33-37, and col. 9, lines 31-34.

19. As per claims 47 and 48, the "...carryable memory media are memory card..." is taught by Quinn at col. 11, lines 10-17.

20. Claims 12-16, 18, 23, and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn and Otsuka as applied to claim 11 above, and further in view of Carley et al. (U.S. Patent No. 6,701,345).

As per claims 12 and 35, the "...is stored in said carryable memory media..." is taught by Quinn at col. 11, lines 10-17, the "...at a data area..." is taught by Otsuka at col. 5, lines 49-52, the "...corresponding to said directory for storing no-specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10, but the "...an attached file attached to electronic mail received..." is not taught by either Quinn or Otsuka.

However, Carley teaches the use of files attached to electronic mail as follows:

"...In addition to the ability to send simple ASCII text, e-mail systems usually provide the capability to attach binary files to messages..." at col. 51, lines 61-62.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Carley with Quinn and Otsuka to provide files attached to e-mail messages in order to use standard procedures for sending electronic files over networks and gain wider acceptance of the system. Quinn, Otsuka, and Carley have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, and the use of formats. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, and Carley provides files attached to e-mail.

21. As per claims 13 and 36, the "...separation means for separating data..." is taught by Carley at col. 13, lines 53-56,

the "...received through said communication means into a plurality of files...", is taught by Quinn at col. 10, lines 52-55 and col. 13, lines 4-10,

the "...wherein at least one file among said plurality of files...", is taught by Quinn at col. 13, lines 4-10,

the "...is stored in said carryable memory media...", is taught by Quinn at col. 11, lines 10-17,

the "...at a data area...", is taught by Otsuka at col. 5, lines 49-52,

the "...corresponding to the directory for storing specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,

the "...and the remaining files are stored in said carryable memory media...", is taught by Quinn at col. Col. 13, lines 4-10 and col. 11, lines 10-17,

the "...at a data area...", is taught by Otsuka at col. 5, lines 49-52,

and the "...corresponding to said directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

22. As per claims 14 and 37, the "...an operation section for operation by a user...", is taught by Carley at col. 15, lines 24-25,
the "...and separation means for separating data...", is taught by Carley at col. 13, lines 53-56,
the "...received through said communication means into a plurality of files...", is taught by Quinn at col. 10, lines 52-55 and col. 13, lines 4-10,
the "...wherein based on operation by a user of the operation section...", is taught by Carley at col. 15, lines 24-25,

Art Unit: 2177

the "...at least one file among said plurality of files is stored in said carryable memory media...", is taught by Quinn at col. 13, lines 4-10 and col. 11, lines 10-17,

the "...at a data area...", is taught by Otsuka at col. 5, lines 49-52,

the "...corresponding to the directory for storing specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,

the "...and based on operation by a user of the operation section...", is taught by Carley at col. 15, lines 24-25,

the "...remaining files are stored in said carryable memory media...", is taught by Quinn at col. 13, lines 4-10 and col. 11, lines 10-17,

the "...at a data area...", is taught by Otsuka at col. 5, lines 49-52,

the "...corresponding to said directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

23. As per claims 15 and 38, the "...separation means for separating an e-mail with the attached file...", is taught by Carley at col. 13, lines 53-56 and col. 51, lines 61-62,

the "...received through said communication means...", is taught by Quinn at col. 10, lines 52-55,

the "...into the e-mail document file and the attached file...", is taught by Carley at col. 51, lines 61-62,

the "...wherein said e-mail document file...", is taught by Carley at col. 51, lines 61-62,

the "...is stored in said carryable memory media...", is taught by Quinn at col. 11, lines 10-17,

the "...at a data area..." is taught by Otsuka at col. 5, lines 49-52,
the "...corresponding to the directory for storing specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,
the "...and said attached file..." is taught by Carley at col. 51, lines 61-62,
the "...is stored in said carryable memory media..." is taught by Quinn at col. 11, lines 10-17,
the "...at a data area..." is taught by Otsuka at col. 5, lines 49-52,
and the "...corresponding to said directory for storing non-specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

24. As per claims 16 and 39, the "...separation means for separating e-mail with the attached file..." is taught by Carley at col. 13, lines 53-56 and col. 51, lines 61-62,
the "...received through said communication means..." is taught by Quinn at col. 10, lines 52-55,
the "...into the e-mail document file and the attached file..." is taught by Carley at col. 51, lines 61-62,
the "...wherein based on operation by a user of the operation section..." is taught by Carley at col. 15, lines 24-25,
the "...the e-mail document file..." is taught by Carley at col. 51, lines 61-62,
the "...is stored in said carryable memory media..." is taught by Quinn at col. 11, lines 10-17,
the "...at a data area..." is taught by Otsuka at col. 5, lines 49-52,

the "...corresponding to the directory for storing specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,
the "...and based on operation by a user of the operation section..." is taught by Carley at col. 15, lines 24-25,
the "...attached file..." is taught by Carley at col. 51, lines 61-62,
the "...is stored in said carryable memory media..." is taught by Quinn at col. 11, lines 10-17,
the "...at a data area..." is taught by Otsuka at col. 5, lines 49-52,
and the "...corresponding to said directory for storing non-specific format files..." is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

25. As per claims 18 and 23, the "...said control means controls at least one process among the following processes to be performed..." is taught by Quinn at col. 3, lines 14-17,
the "...on said extracted file..." is taught by Quinn at col. 9, lines 31-34,
the "...for deleting the file..." is taught by Quinn at col. 3, lines 13-18,
the "...shifting the file..." is taught by Quinn at col. 3, lines 11-13,
the "...to a data area..." is taught by Otsuka at col. 5, lines 49-52,
the "...of said carryable memory media..." is taught by Quinn at col. 11, lines 10-17,
the "...which data area..." is taught by Otsuka at col. 5, lines 49-52,
the "...corresponding to a different directory other than the original directory..." is taught by Quinn at col. 9, lines 47-49,
the "...and storing it in there..." is taught by Quinn at col. 13, lines 4-10,

the "...transmitting the file as an attached file..." is taught by Carley at col. 51, lines 61-62,

and the "...and exhibiting it on a display..." is taught by Quinn at col. 3, lines 14-17.

26. Claims 19, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn and Otsuka as applied to claim 17 above, and further in view of Koyama (U.S. Patent No. 5,978,551).

As per claim 19, the "...said file extraction means extracts the file..." is taught by Quinn at col. 9, lines 31-34, the "...that conforms to said specific file form..." is taught by Quinn at col. 13, lines 4-10, but the "...based on the file expansion index..." is not taught by either Quinn or Otsuka,

However, Koyama teaches the use of file expansion indexes as follows:

"...It is to be noted that picture data recorded after undergone fixed length encoding along with header is read out as it is from the picture index file and the overall index file without allowing it to undergo expansion decoding processing to transfer it into the main memory 11a..." at col. 48, lines 27-31.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Koyama with Quinn and Otsuka to provide file expansion indexes in order to use standard procedures for creating compressed files by using indexes and gain wider acceptance of the system. Quinn, Otsuka, and Koyama have related applications and use similar technologies. They teach the use of computers or processors, the use of databases or data structures, the use of directories, the use of files, the use of tables, and the use of formats. Quinn provides the directories and the

storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, and Koyama provides file expansion indexes.

27. As per claim 24, the "...said file extraction means extracts the file...", is taught by Quinn at col. 9, lines 31-34,
the "...that conforms to specific file form through the following process...", is taught by Quinn at col. 13, lines 4-10,
the "...primary extraction based on the file expansion index...", is taught by Koyama at col. 48, lines 27-31,
and the "...extraction once again based on the inner structure of those extracted by said primary extraction...", is taught by Quinn at col. 9, lines 31-34 and col. 11, lines 62-64.

28. As per claim 25, the "...video processing function...", is taught by Koyama at col. 10, lines 22-34,
the "...said directory for storing specific format files containing a directory...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,
the "...for storing video information form files...", is taught by Otsuka at col. 3, lines 30-34,
the "...wherein a video information file is extracted...", is taught by Koyama ay col. 10, lines 22-34 and col. 35, lines 36-38,
the "...from both of the data areas...", is taught by Otsuka at col. 5, lines 49-52,
the "...of said carryable memory media...", is taught by Quinn at col. 11, lines 10-17,
the "...one data area...", is taught by Otsuka at col. 5, lines 49-52,

the "...is that which corresponds to the directory...", is taught by Quinn at col. 9, lines 47-49,

the "...for storing video information form files...", is taught by Otsuka at col. 3, lines 30-34,

the "...and the other data area...", is taught by Otsuka at col. 5, lines 49-52,

and the "...is that which corresponds to said directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

29. Claims 28-31 and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn and Otsuka as applied to claim 6 above, and further in view of Yokota yet al. (U.S. Patent No 6,691,149) and Carley.

As per claims 28 and 40, the "...communication means...", is taught by Quinn at col. 10, lines 52-55,

the "...stored in a data area...", is taught by Otsuka at col. 5, lines 49-52,

the "...corresponding to said directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,

the "...via said communication means...", is taught by Quinn at col. 10, lines 52-55,

but the "...wherein the portable information terminal...",

the "...transmits the attached file...",

and the "...accompanying an e-mail...", are not taught by either Quinn or Otsuka.

However, Yokota teaches the use of portable information terminals as follows:

"...Since the contents data copied to the hard disk of the personal computer can be moved to up to three portable terminal units or up to three memories according to the standard of SDMI,

Art Unit: 2177

the content data can be substantially copied to up to four units..." at col. 38, lines 38-42.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Yokota with Quinn and Otsuka to provide portable information terminals in order to use readably available small hand-held terminals for the processing of computer functions and gain wider acceptance of the system. Quinn, Otsuka, and Yokota have related applications and use similar technologies. They teach the use of computers or processors, the use of databases or data structures, the use of directories, the use of files, the use of tables, the use of formats, and the use of memory cards. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, and Yokota provides portable information terminals.

Koyama does not teach the use of electronic mail or attached files.

However, Carley teaches the use of files attached to electronic mail as follows:

"...In addition to the ability to send simple ASCII text, e-mail systems usually provide the capability to attach binary files to messages..." at col. 51, lines 61-62.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Carley with Quinn, Otsuka, and Koyama to provide files attached to e-mail messages in order to use standard procedures for sending electronic files over networks and gain wider acceptance of the system. Quinn, Otsuka, Koyama, and Carley have related applications and use related technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, and the use of formats. Quinn provides the directories and the

storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, Yokota provides portable information terminals, and Carley provides files attached to e-mail.

30. As per claims 29 and 41, the "...said file control means...", is taught by Quinn at col. 3, lines 14-17,
the "...deletes a file...", is taught by Quinn at col. 3, lines 13-18,
the "...which had been stored in a data area...", is taught by Otsuka at col. 5, lines 49-52,
the "...corresponding to said directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,
and the "...after it is transmitted via said communication means...", is taught by Quinn at col. 10, lines 52-55.

31. As per claims 30 and 42, the "...said file control means...", is taught by Quinn at col. 3, lines 14-17,
the "...shifts a file...", is taught by Quinn at col. 3, lines 11-13,
the "...that had been stored in a data area...", is taught by Otsuka at col. 5, lines 49-52,
the "...corresponding to said directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,
the "...after it was transmitted via said communication means...", is taught by Quinn at col. 10, lines 52-55,
the "...to a data area...", is taught by Otsuka at col. 5, lines 49-52,
the "...of said carryable memory media...", is taught by Quinn at col. 11, lines 10-17,

the "...that corresponds to a certain directory other than said original directory for storing specific formal files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10, and the "...and said original directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

32. As per claims 31 and 43, the "...said instruction means issues one of the following instructions...", is taught by Quinn at col. 12, lines 33-37, the "...based on operation of the operation section by a user...", is taught by Carley at col. 15, lines 24-25, the "...after a file stored in a data area...", is taught by Otsuka at col. 5, lines 49-52, the "...corresponding to said directory for storing non-specific format files...", is taught by Quinn at col. 13, lines 4-10, the "...is transmitted via said communication means...", is taught by Quinn at at col. 10, lines 52-55, the "...regarding how the transmitted file be handled...", is taught by Quinn at col. 4, lines 11-13, the "...leaving the transmitted file...", is taught by Quinn at col. 4, lines 11-13, the "...in said directory for storing non-specific format files...", is taught by Quinn at col. 13, lines 4-10, the "...deleting the transmitted file...", is taught by Quinn at col. 3, lines 13-18, the "...shifting the transmitted file...", is taught by Quinn at col. 3, lines 11-13, the "...to a data area...", is taught by Otsuka at col. 5, lines 49-52, the "...of said carryable memory media...", is taught by Quinn at col. 11, lines 10-17,

the "...that corresponds to a certain specific directory other than said original directory for storing specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,

and the "...and said original directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10.

33. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn and Otsuka as applied to claim 6 above, and further in view of Yokota and Fukunaga et al. (U.S. Patent No. 6,775,023).

As per claim 26, the "...from data area...", is taught by Otsuka at col. 5, lines 49-52,

the "...of said carryable memory media...", is taught by Quinn at col. 11, lines 10-17,

the "...based on the directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,

the "...from said carryable memory media...", is taught by Quinn at col. 11, lines 10-17,

the "...of the directory for storing non-specific format files...", is taught by Quinn at col. 9, lines 47-49 and col. 13, lines 4-10,

the "...and a process of checking the inner structure...", is taught by Quinn at col. 11, lines 62-64,

but the "...portable information terminal...",

the "...extracts the Exif format image file through either one of the following processes...",

the "...extracting the JPG image file...",

the "...or extracting the image file...",

the "...based on the JPG expansion index .jpg...",

and the "...of said image file extracted...", are not taught by either Quinn or Otsuka.

However, Yokota teaches the use of portable information terminals as follows:

"...Since the contents data copied to the hard disk of the personal computer can be moved to up to three portable terminal units or up to three memories according to the standard of SDMI, the content data can be substantially copied to up to four units..." at col. 38, lines 38-42.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Yokota with Quinn and Otsuka to provide portable information terminals in order to use readably available small hand-held terminals for the processing of computer functions and gain wider acceptance of the system. Quinn, Otsuka, and Yokota have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, the use of formats, and the use of memory cards. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, and Yokota provides portable information terminals.

Koyama does not teach the extraction of files in the EXIF or JPEG formats.

However Fukunaga teaches the extraction of files in the EXIF or JPEG formats as follows:

"...The center transmission/reception controller 407 has: a function of managing data generated and collected by an application program such as image collector 405 of the center server and kept in a center transmission box 418 to be described

Art Unit: 2177

later, and extracting transmission data for the image server 111 or print server 121 from the center transmission box 418 and transmitting the extracted transmission data, in response to a data transmission/reception start request received by the image server 111 or print server 121 via NETIF 1004; and a function of storing reception data received from the image server 111 or print server 121 in a center reception box 419 to be later described and using an application program for analyzing the reception data and processing it by developing the application program from HDD 1009 or the like upon RAM 1002..." at col. 9, lines 56-67 and col. 10, lines 1-3.

"...The image format used is a format which allows to write additional information such as a comment, for example, a JFIF (JPEG Interchange Format) which is one of the image data formats using JPEG compression algorithms. The image ID of the image generated at Step S1503 and stored in RAM 2002 is written as the additional information. The image data formats include JFIF, GIF, TIF, EXIF, ZIP and the like, and the registration process is executed by using the format desired by the user..." at col. 21, lines 2-10.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Fukunaga with Quinn, Otsuka, and Koyama to provide extraction of files in the EXIF or JPEG formats in order to use standard formats for video information and gain wider acceptance of the system. Quinn, Otsuka, Koyama, and Fukunaga have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, the use of formats, and the use of memory cards. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, Koyama provides portable information terminals, and Fukunaga provides extraction of files in the EXIF or JPEG formats.

34. As per claim 27, the "...the portable information terminal..." is taught by Yokota at col. 38, lines 38-42, the "...prints the extracted Exif format file..." is taught by Fukunaga at col. 9, lines 56-67, col. 10, lines 1-3, and col. 21, lines 2-10, and the "...upon an operation made by a user..." is taught by Fukunaga at col. 5, lines 42-47.

35. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn and Otsuka as applied to claims 6 and 32 above respectively, and further in view of Nishigaya et al. (U.S. Patent No. 5,696,900).

As per claims 44 and 45 the "...portable information terminal is a portable telephone unit..." is not taught by either Quinn or Otsuka.

However, Nishigaya teaches the use of portable information terminals and portable telephones as follows:

"...Further, in this instance, the service control program means 2-1 discriminates whether or not the type of the terminal to be registered is a terminal (hereinafter referred to as user position detection terminal) which may possibly move geographically like a portable information terminal 9 such as a portable telephone set..." at col. 24, lines 54-61.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Nishigaya with Quinn and Otsuka to provide portable information terminals in order to use readily available small hand-held terminals such as portable telephones for the transfer of information and gain wider acceptance of the system. Quinn, Otsuka, and Nishigaya have related applications and use similar technologies. They teach the use of computers, the use of databases, the use of directories, and the

use of tables. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, and Nishigaya provides portable information terminals such as portable telephones.

36. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn et al. (U.S. Patent No. 6,449,617), Otsuka et al. (U.S. Patent No. 5,454,096), and Yokota et al. (U.S. patent No. 6,691,149).

37. Quinn renders obvious independent claim 8, by the following:

“...carryable memory media detachable to and from the terminal body...” at col. 11, lines 10-17.

“...wherein said carryable memory media...” at col. 11, lines 10-17.

“...is provided with a first directory for storing files of one file form...” at col. 9, lines 47-49 and col. 13, lines 4-10.

“...if a file to be stored conforms to the file form of said first directory...” at col. 13, lines 4-10 and col. 9, lines 47-49.

“...of said memory media...” at col. 11, lines 10-17.

“...stores the relevant file in the carryable memory media...” at col. 13, lines 4-10 and col. 11, lines 10-17.

“...corresponding to said first directory...” at col. 9, lines 47-49.

“...if a file to be stored does not conform to the file form of said first directory...” at col. 13, lines 4-10 and col. 9, lines 47-49.

“...of said memory media...” at col. 11, lines 10-17.

“...in said carryable memory media...” at col. 11, lines 10-17.

"...and stores the relevant file in the carryable memory media..." at col. 13, lines 4-10 and col. 11, lines 10-17.

"...corresponding to said second directory..." at col. 9, lines 47-79.

Quinn does not teach the forming of directories, the use of data areas, and the use of portable terminals.

38. However, Otsuka teaches the forming of directories and the use of data areas as follows:

"...at a data area..." at col. 5, lines 49-52.

"...forms a second directory that is different from the first directory..." at col. 8, lines 62-68.

"...at a data area..." at col. 5, lines 49-52.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Otsuka with Quinn to form directories and provide data storage areas in order to use standard procedures for defining directories and their storage areas and gain wider acceptance of the system. Quinn and Otsuka have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, the use formats, and the use of memory cards. Quinn provides the directories and the storing of specific format files and non-specific format files and Otsuka forms directories and provides data storage areas.

Otsuka does not teach the use of portable information terminals.

39. However, Yokota teaches the use of portable information terminals as follows:

"...said portable information terminal..." at col. 38, lines 38-42.

"...said portable information terminal..." at col. 38, lines 38-42.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Yokota with Quinn and Otsuka to provide portable information terminals in order to use readably available small hand-held terminals for the processing of computer functions and gain wider acceptance of the system. Quinn, Otsuka, and Yokota have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, the use of formats, and the use of memory cards. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, and Yokota provides portable information terminals.

40. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn, Otsuka, and Yokota as applied to claim 8 above, and further in view of Iida.

As per claim 10, the "...the portable information terminal..." is taught by Yokota at col. 38, lines 38-42,
the "...forms a directory..." is taught by Otsuka at col. 8, lines 62-68,
the "...and stores the relevant file..." is taught by Quinn at col. 13, lines 4-10,
the "...that does not conform to the file form of said first directory..." is taught by Quinn at col. 13, lines 4-10 and col. 9, lines 47-49,

the "...in the carryable memory media..." is taught by Quinn at col. 11, lines 10-17,
the "...at a data area..." is taught by Otsuka at col. 5, lines 49-52,
but the "...as a lower branch of said second directory..."
and the "...corresponding to said lower branch directory..." are not taught by either
Quinn, Otsuka, or Yokota.

However lida teaches the use of lower level directories as follows:

"...For the sub-directory that is the lower layer of a certain directory, the data are stored not in the area of the root directory shown in FIG. 12 but in the data area..." at col. 16, lines 26-28.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine lida with Quinn, Otsuka, and Yokota to use a lower layer on a directory tree in order to allow users of a data media to store related data having different formats or other attributes at different levels in a directory tree to facilitate navigation between these different types of data. Quinn, Otsuka, Yokota, and lida have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, and the use of formats. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, Yokota provides portable information terminals, and lida provides directories with different levels of sub-directories.

41. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn et al. (U.S. Patent No. 6,449,617), Otsuka et al. (U.S. Patent No. 5,454,096), Koyama et al. (U.S. patent No. 6,691,149), and lida et al. (U.S. Patent No. 6,385,690).

42. Quinn renders obvious independent claim 9 by the following:

"...carryable memory media detachable to and from the terminal body..." at col. 11, lines 10-17.

"...wherein said carryable memory media..." at col. 11, lines 10-17.

"...is provided with a first directory for storing files of one file form..." at col. 9, lines 47-49 and col. 13, lines 4-10.

"...if a file to be stored conforms to the file form of said first directory..." at col. 13, lines 4-10 and col. 9, lines 47-49.

"...of said memory media..." at col. 11, lines 10-17.

"...stores the relevant file..." at col. 13, lines 4-10.

"...in the carryable memory media..." at col. 11, lines 10-17.

"...corresponding to said first directory..." at col. 9, lines 47-49.

"...if a file to be stored does not conform to the file form of said first directory..." at col. 13, lines 4-10 and col. 9, lines 47-49.

"...of said memory media..." at col. 11, lines 10-17.

"...that is different from the first directory..." at col. 9, lines 47-49.

"...in said carryable memory media..." at col. 11, lines 10-17.

"...and stores the relevant file in said memory media..." at col. 13, lines 4-10 and col. 11, lines 10-17.

"...corresponding to said second directory..." at col. 9, lines 47-49.

Quinn does not teach the forming of directories, the use of data areas, the use of portable informational terminals, the use of user operations, and the use of user notifications.

43. However, Otsuka teaches the forming of directories and the use of data areas as follows:

"...at a data area..." at col. 5, lines 49-52.

"...forms a second directory..." at col. 8, lines 62-68.

"...at a data area..." at col. 5, lines 49-52.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Otsuka with Quinn to form directories and provide data storage areas in order to use standard procedures for defining directories and their storage areas and gain wider acceptance of the system. Quinn and Otsuka have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, the use formats, and the use of memory cards. Quinn provides the directories and the storing of specific format files and non-specific format files and Otsuka forms directories and provides data storage areas.

Otsuka does not teach the use of portable informational terminals, the use of user operations, and the use of user notifications.

44. However, Yokota teaches the use of portable information terminals as follows:

"...said portable information terminal..." at col. 38, lines 38-42.

"...said portable information terminal..." at col. 38, lines 38-42.

"...said portable information terminal..." at col. 38, lines 38-42.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Yokota with Quinn and Otsuka to provide portable information terminals in order to use readably available small hand-held terminals for the processing of computer functions and gain wider acceptance of the system. Quinn, Otsuka, and Yokota have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, the use of formats, and the use of memory cards. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, and Yokota provides portable information terminals.

Yokota does not provide the use of user operations and user notifications.

45. However, Carley provides user the use of user operations and user notifications as follows:

"...notifies the user about the non-conformity..." at col. 14, lines 1-4 and col 34, lines 33-37.

"...upon operation by a user..." at col. 15, lines 24-25.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to combine Carley with Quinn, Otsuka, and Yokata to provide user operations and user notifications in order to use standard procedures for providing user input and replies to a user at a terminal and gain wider acceptance of the system. Quinn, Otsuka,

Yokata, and Carley have related applications and use similar technologies. They teach the use of computers, the use of databases or data structures, the use of directories, the use of files, the use of tables, and the use of formats. Quinn provides the directories and the storing of specific format files and non-specific format files, Otsuka forms directories and provides data storage areas, Yokata provides portable information terminals, and Carley provides user operations and user notifications.

Conclusion

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (703)-305-1802. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (703)-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2177

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Harold E. Dodds, Jr.

Harold E. Dodds, Jr.

Patent Examiner

September 7, 2004


GRETA ROBINSON
PRIMARY EXAMINER